Maine CDC/DHHS Update on Novel Influenza A (H1N1) Virus
October 29, 2009

Increased Flu Activity in Maine and the US

The 2009 H1N1 flu is now widespread in Maine, as it is in nearly all U.S. states. The 2009 H1N1 flu is the predominant influenza virus in circulation in most countries worldwide.

In the past week, there were two new hospitalizations for H1N1 flu in Maine; both patients have been discharged and are recovering. Maine continues to see overall increases in outpatient visits for influenza-like illness; much of this is most likely due to H1N1. The vast majority of people with ILI are not being tested, and do not need to be. People with confirmed H1N1 are primarily children and young adults.

In the past week, nine new outbreaks of H1N1 were reported in school settings in Maine.

H1N1 Vaccine Supply and Prioritization

As of October 28, a total of 99,000 doses of vaccine had been allocated to the state, which is about 14% of the total amount of vaccine needed for **prioritized populations** in the state. Vaccine is continuing to be shipped as soon as it is allocated. However, **it is possible that there will not be sufficient supplies of vaccine for some of the highest priority people until December.**

Maine CDC is developing short-term plans, which are constantly being reevaluated, based on the supply of vaccine being allocated to us from the federal government. **Vaccine is being sent out in response to several factors, including current trends in infections, prioritized populations, and the supply available. Every county in the state has received some vaccine, and will continue to receive it as it is available.**

Less than 2% of the vaccine that has arrived to date is in the formulation most frequently requested for children under age three. About a third of the vaccine that has arrived is in the nasal spray form, which cannot be given to many people in the priority populations, but can be administered to healthy children over the age of two.

We are focusing our first doses on children and pregnant women, because they are the most disproportionately affected by H1N1. We are providing some vaccine to pediatric providers for very young children, household members of children under six months old, and some high-risk children. Most of our vaccine is going to schools.

Vaccine clinics for school children have been held in the Sanford/Springvale, greater Portland, Lewiston, Augusta, and Bangor areas, as well as in Passamaquoddy Indian Township in the past week. Vaccinating children, who are the major transmitters of flu, provides some protection to the entire community.

As more vaccine arrives, we will broaden our distribution to other high risk groups, including young adults, people with health conditions, and health care and emergency services personnel. Once the full supply of vaccine has arrived, we plan to offer it to anyone who wants it.

In the mean time, people in priority groups who do not have access to vaccine yet can take some steps to protect themselves:

- If vaccine is appropriately available to other members of the household (for instance, children who can be vaccinated in their school), then this is one way to provide some protection to a high-risk individual.
- If you can get a seasonal flu vaccine (which is also in short supply in many areas), do so. The seasonal flu vaccine will not protect you from H1N1, but by protecting you from seasonal flu, it will keep you from getting run down and therefore being more likely to get H1N1.
- Avoid close contact with people who are sick. Wash or sanitize your hands often.
- Keep checking the clinic locator on our web site: http://www.maine.gov/dhhs/boh/maineflu/fluclinics/index.shtml

- Your health care provider may prescribe antiviral medicine if someone in the household is sick with a fever plus cough and/or sore throat and the sick person, or a household member, meets one or more of these criteria:
    - Younger than 2 years-old
    - Older than 64 years-old
    - Pregnant
    - Has an underlying medical condition

  These antiviral prescription medicines (Tamiflu or Relenza) may help reduce the severity of the flu.

H1N1 Vaccination Distribution by County as of October 28*:

COUNTY	DOSES	% OF POPULATION REPRESENTED BY VACCINE
Cumberland	28,900	10%
Kennebec	12,600	10%
Penobscot	12,200	8%
York	12,100	6%
Androscoggin	8,500	8%
Knox	4,400	11%
Aroostook	4,200	6%
Oxford	3,200	6%
Hancock	2,300	4%
Somerset	2,300	5%
Washington	2,000	6%
Waldo	2,100	6%
Franklin	1,800	6%
Lincoln	1,700	5%
Piscataquis	500	3%
Sagadahoc	200	1%
	99,000	**Average = 6%**

* Note: Some health care providers receiving vaccine in one county serve patients in other counties. For instance, many people living in Sagadahoc County are served by health care providers in adjacent counties. Additionally, in some counties with a low amount of vaccine, health care providers are in the process of ordering vaccine.

Online School and Public Flu Clinic Calendar

A sortable calendar of flu clinics can be found at: http://www.maine.gov/dhhs/boh/maineflu/fluclinics/index.shtml. If you are a clinic organizer and need help posting a clinic, please email flu.questions@maine.gov for assistance.

At this point in time, because of the limited supply of H1N1 vaccine in Maine, the public clinics listed on this clinic locator are for people in the very high-risk categories described above. We suggest you look at the clinic details to determine who the particular clinic is focused on. All clinics offering H1N1 vaccine that are open to the public (even if only for high priority populations) are required to be posted on this website. We anticipate it may be several weeks before very broad-based public clinics for H1N1 vaccine are available.

Information for Health Care Providers Receiving Vaccine

We are asking that health care providers receiving shipments of H1N1 vaccine make sure it is immediately available to schools if they are serving as a distribution site for schools, and that in general, pregnant women and children be prioritized. About 90% of the H1N1 vaccine supply arriving in Maine these first few weeks should be directed to pregnant women and children. We encourage pediatric providers to collaborate with other practitioners who see relatively few pre-schoolers to ensure access to vaccine.

We expect that all health care providers who have registered to receive vaccine will eventually receive it. Providers are notified by fax when vaccine is assigned to them for shipping.

Health Care Providers may still sign up to receive H1N1 vaccine by completing the registration form: http://www.maine.gov/dhhs/boh/maineflu/h1n1/provider-agreement-2009-2010.shtml. Registered providers may find order forms and vaccine reporting forms here: http://www.maine.gov/dhhs/boh/maineflu/h1n1/health-care-providers.shtml. **If you are a Health Care Provider that is part of a larger health system that has already placed an order for your practice, we ask that you not register as a separate provider, to prevent duplication.**

The H1N1 vaccine ingredients are available online at:
http://www.fda.gov/BiologicsBloodVaccines/Vaccines/QuestionsaboutVaccines/ucm186102.htm#at

US CDC issued its top 10 frequently asked questions related to vaccine:
http://www.flu.gov/professional/hospital/10vaccinefaqs.html

Seasonal Flu Vaccine Delay

It appears there will be continued delays in obtaining expected seasonal flu vaccine. Very recent information indicates it may be until late November when all the remaining shipments of our seasonal flu vaccine supply will arrive. However, we do anticipate being able to fill all orders. Maine CDC cannot accept any new orders for seasonal flu vaccine, as we have orders for all of the doses we will be getting.

Currently, the predominant virus is novel H1N1, so it is important to offer children and others at risk the H1N1 vaccine as soon as possible.

Antiviral Treatment

Since we are experiencing delays in receiving both H1N1 and seasonal flu vaccines into the state, Health Care Providers are encouraged to keep current on antiviral treatment recommendations:

- **EUA on Peramivir IV**: Because the FDA has no intravenous formulation of antiviral product for the treatment of hospitalized patients with influenza, it has i issued an Emergency Use Authorization of Peramivir IV (http://www.cdc.gov/h1n1flu/eua/peramivir.htm). Peramivir IV is currently under development for treatment of acute influenza in patients who require hospitalization due to the severity of influenza virus infection. The efficacy and safety of Peramivir have not yet been established. For more information: http://emergency.cdc.gov/h1n1antivirals/

- **Early Treatment with Antiviral Medications:** Current recommendations may be found at: http://www.cdc.gov/H1N1flu/recommendations.htm. When treatment of influenza is indicated in a patient with suspected influenza, health care providers should initiate empiric antiviral treatment as soon as possible. Waiting for laboratory confirmation of influenza to begin treatment with antiviral drugs is not necessary. Patients with a negative rapid influenza diagnostic test should be considered for treatment if clinically indicated because a negative rapid influenza test result does not rule out influenza virus infection. **The sensitivity of rapid influenza diagnostic tests for 2009 H1N1 virus can range from 10% to 70%, indicating that false negative results occur frequently.** Early empiric treatment with oseltamivir or zanamivir is recommended for all persons with suspected or confirmed influenza requiring hospitalization. Prompt empiric outpatient antiviral therapy is also recommended for persons with suspected influenza who have symptoms of lower respiratory tract illness or clinical deterioration regardless of previous health or age.

  Early empiric treatment should be considered for persons with suspected or confirmed influenza who are at higher risk for complications, even if not hospitalized, including:
    - Children younger than 2 years-old
    - Adults 65 years and older
    - Pregnant women

- Persons with the following conditions: chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological (including sickle cell disease), or metabolic disorders (including diabetes mellitus); disorders that that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders); immunosuppression, including that caused by medications or by HIV;
- Persons younger than 19 years of age who are receiving long-term aspirin therapy, because of an increased risk for Reye syndrome.

- This podcast (http://www2c.cdc.gov/podcasts/player.asp?f=175219) discusses the use of antiviral drugs for the treatment and prevention of influenza, including 2009 H1N1, during the 2009-2010 influenza season.

- Additional antiviral treatment guidance from US CDC may be found at: http://www.cdc.gov/h1n1flu/antivirals/

Additional US CDC Updates for Health Care Providers

- Updated Recommendations for Clinicians Treating HIV-Positive Adults and Adolescents: http://www.flu.gov/professional/hospital/hivadultsadolescents.html\
- Prevention of Pneumococcal Infections Secondary to Seasonal and 2009 H1N1 Influenza Viruses Infection: http://www.cdc.gov/h1n1flu/vaccination/provider/provider_pneumococcal.htm and related Q&A: http://www.cdc.gov/h1n1flu/vaccination/public/public_pneumococcal.htm

Other Updates from US CDC

- What Adults with HIV Infection Should Know about H1N1: http://www.flu.gov/individualfamily/healthconditions/aids/adults.html

Maine CDC H1N1 Activities This Past Week

Calls received by the phone bank.	304
Questions coming into flu.questions@maine.gov	141
Hits on the webpages associated with www.maineflu.gov	21,014
Lab tests we (HETL at Maine CDC) conducted	263
Lab tests we (HETL) conducted total since April.	5,314
Calls coming into the clinical consultation line	166
Maine CDC employees whose jobs do not normally involve anything related to H1N1 who have volunteered with the phone bank and other related efforts	123
Maine CDC employees who have been redeployed from other activities to focus on H1N1	96

How to Stay Updated

- **Flu News:** View current Maine CDC press releases, Thursday morning weekly updates, and urgent updates from our Health Alert Network (HAN) by visiting: http://www.maine.gov/dhhs/boh/maineflu/flu-news.shtml. RSS feeds are available for the weekly updates and HAN.
- **Follow Maine CDC's Social Media Updates:**
  - **Facebook** (search for "Maine CDC")
  - **Twitter** (http://twitter.com/MEPublicHealth)
  - **MySpace** (www.myspace.com/mainepublichealth)
  - **Maine CDC's Blog** (http://mainepublichealth.blogspot.com)
- **H1N1 Conference Calls:** Maine CDC will be holding conference calls to provide updates and take questions on H1N1. The next call will be held **Monday, November 2, from noon to 1 pm**. To participate, call 1-800-914-3396 and enter pass code 473623#. During calls, please press *6 to mute your line and #6 to un-mute when you are actively participating.

Call or Email Us

- For clinical consultation, outbreak management guidance, and reporting of an outbreak of H1N1 call Maine CDC's toll free 24-hour phone line at: 1-800-821-5821.
- General Public Call-in Number for Questions: 1-888-257-0990
  Deaf and Hard of Hearing phone number: 1-800-606-0215
  Phone lines are open Monday - Friday 9 a.m. – 5 p.m.
- Email your questions to: flu.questions@maine.gov

Maine Weekly Influenza Surveillance Report

October 28, 2009

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services
John E. Baldacci, Governor Brenda M. Harvey, Commissioner

Cumulative data since April 27, 2009

- 604 confirmed and probable cases of H1N1 total to date
  - 436 in Maine residents
    - 18 Maine residents have been hospitalized
  - 168 in out of state residents tested in Maine
    - 5 Out of state residents have been hospitalized in Maine
- 1 death reported to date
- 91% of lab confirmed H1N1 cases in Maine residents and out of state visitors are under the age of 50 (range 0-81 years, mean of 21 years)

Characteristics of Lab Confirmed H1N1 Influenza Cases - Maine Residents, 2009

Age			Gender		At Risk		Hospital Care				Deaths	
Age group	N	%	Male	Female	HCW	Pregnant	Hospitalized	%	ICU	Ventilated	N	%
<5	27	6	17	10	0	0	2	7	0	0	0	0
5 to 18	199	46	100	99	1	0	2	1	0	1	0	0
19 to 24	76	17	32	44	4	0	3	4	0	0	0	0
25 to 49	94	22	36	58	16	2	6	6	1	1	0	0
50 to 64	38	9	18	20	6	0	4	11	2	2	1	2.6
>65	2	0	0	2	0	0	1	50	0	0	0	0
Total	**436**	**~**	**203 (47%)**	**233 (53%)**	**27**	**2**	**18**	**4**	**3**	**4**	**1**	**0.2**

Lab confirmed H1N1 Influenza Cases by County – Maine Residents and Out of State Visitors, 2009

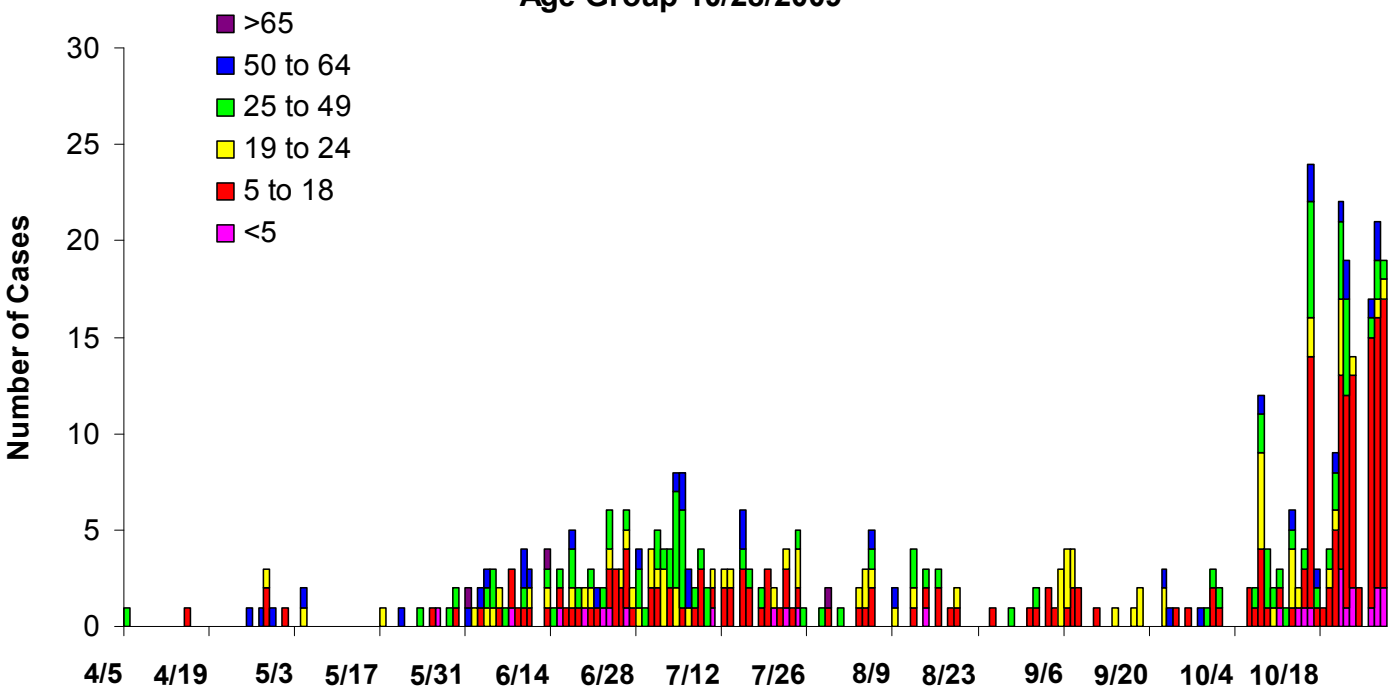
County	Maine Residents	Out of State	Total
Androscoggin	39	9	48
Aroostook	1	0	1
Cumberland	129	66	195
Franklin	0	0	0
Hancock	10	4	14
Kennebec	40	39	79
Knox	4	8	12
Lincoln	29	4	33
Oxford	22	9	31
Penobscot	84	4	88
Piscataquis	0	1	1
Sagadahoc	16	0	16
Somerset	4	2	6
Waldo	2	1	3
Washington	1	1	2
York	55	20	75
Total	**436**	**168**	**604**

Out of state cases are classified by the area in which they are staying (if a summer resident/camper) or the area in which they were tested

New This Week

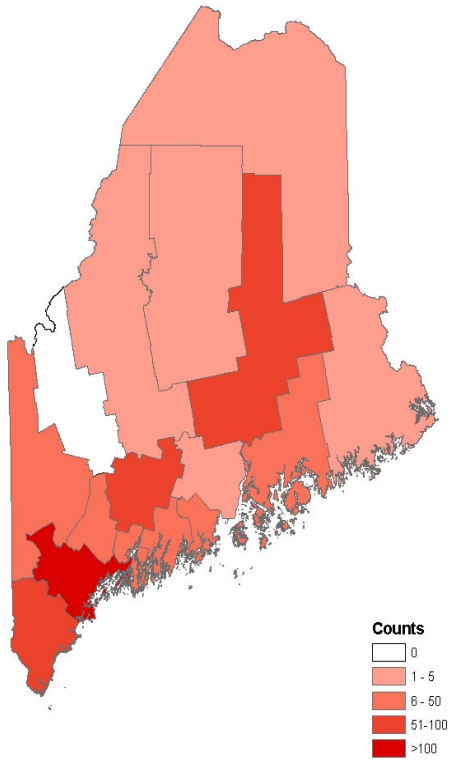
- Federal Flu Code: Widespread
- 118 new confirmed and probable cases of H1N1
  - 111 in Maine residents
  - 6 in out of state residents tested in Maine
- 2 new hospitalizations reported: 1 from Kennebec and 1 from Somerset
  - Both hospitalized patients have been discharged and are recovering
- 9 new outbreaks reported, all in school settings. 1 residential school from Somerset, 3 K-12 schools from Lincoln, 2 K-12 schools from Kennebec, 1 K-12 school from Penobscot and 1 K-12 school from Cumberland
- The first case of H1N1 in Piscataquis county was reported in an out of state resident who was tested in Maine

Confirmed Cases of H1N1 Influenza in Maine Residents, by Onset Date* and Age Group 10/28/2009

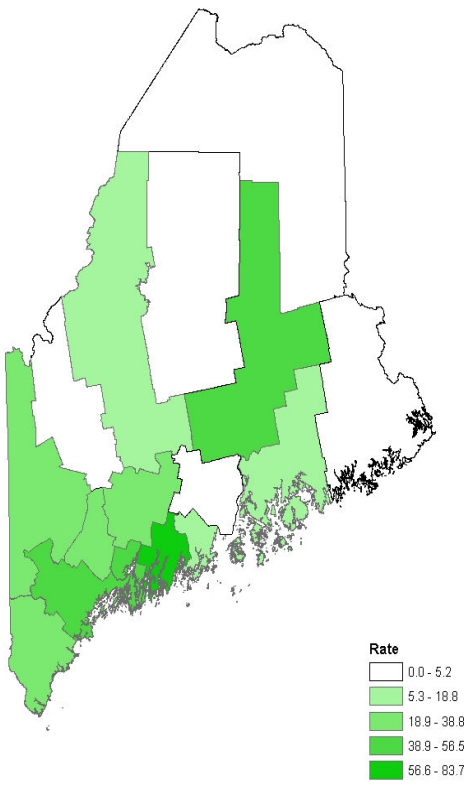


*if onset date is not available, the date reported to the state is used as the onset date

Lab Confirmed H1N1, by County – Maine Residents and Out of State Visitors, 2009

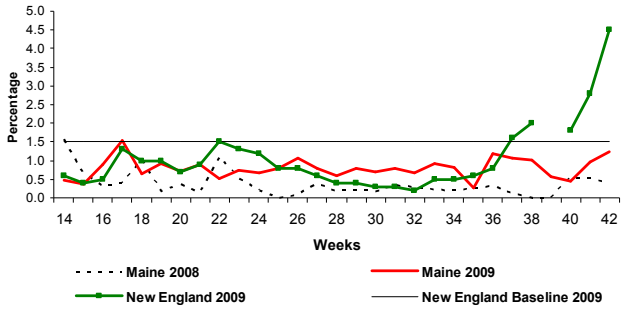


Rate of Lab Confirmed H1N1 Infection per 100,000 People, by County - Maine Residents, 2009

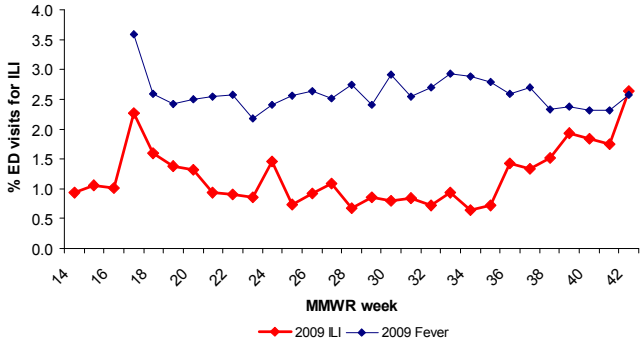


Surveillance Information

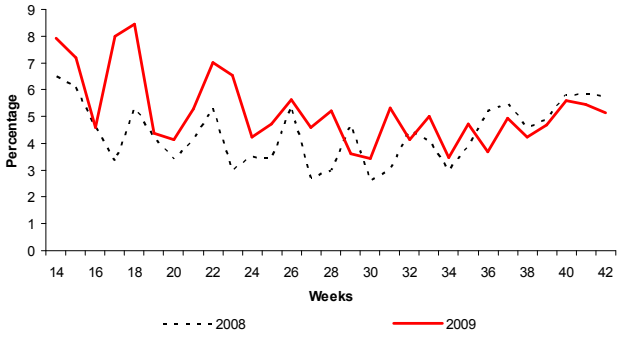
Outpatient Visits for Influenza-like Illness – Maine, 2008-09



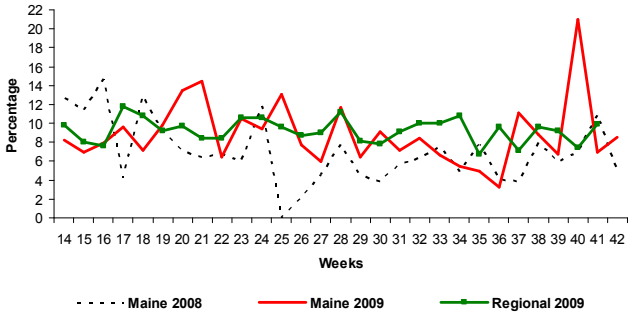
Emergency Department Visits for ILI at Eight Hospitals – Maine, 2009



Hospital Admissions Due to Pneumonia or Influenza – Maine, 2007-09



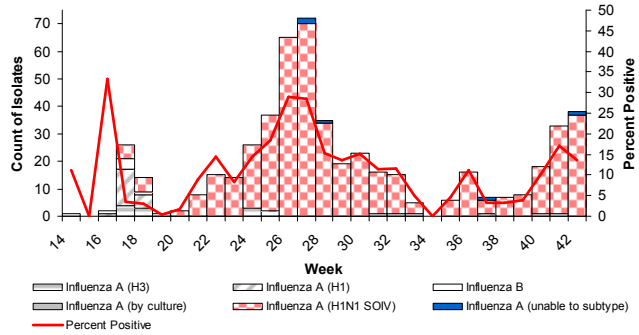
Percentage of Deaths Attributable to Pneumonia or Influenza – Maine, 2007-09



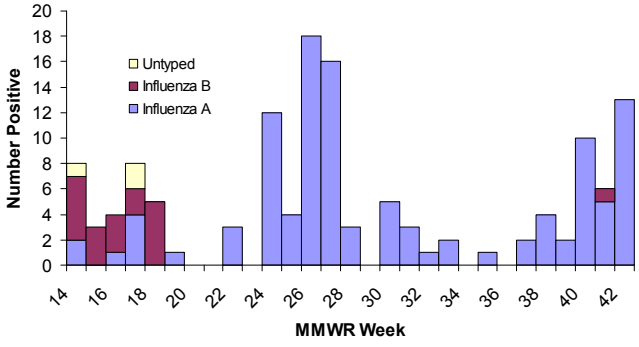
Lab Data

- 5,404 influenza tests have been performed since April 27, 2009
  - 9.3% of tests have been positive for H1N1

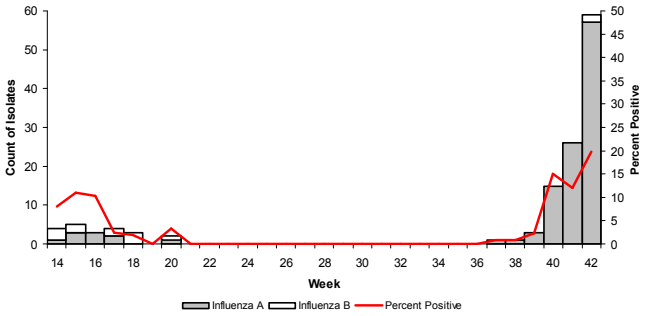
Respiratory Specimens Positive for Influenza from HETL – Maine, 2009



Positive Rapid Influenza Tests – Maine, 2009

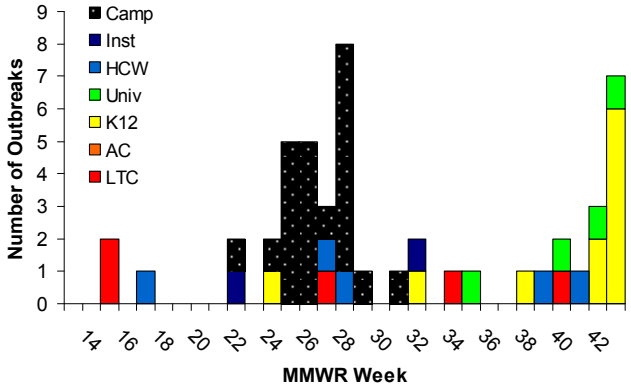


Respiratory Specimens Positive for Influenza from Two Reference Laboratories - Maine, 2009



Influenza-Like Illness Outbreaks – Maine, 2009

Influenza-Like Illness Outbreaks by Facility Type in Maine, April - October 2009



Outbreak Facility Type Key:

LTC - Long Term Care Facility
AC - Acute Care Facility (nosocomial)
K12 - School (K-12) or daycare
Univ - School (residential) or University
HCW - Health care workers
Inst - Other institutions (workplaces, correctional facilities etc)
Camp - Summer Camps

Influenza-Like Illness Outbreaks by Facility Type and County, Maine, April – October, 2009

County	LTC	AC	K12	Univ	HCW	Inst	Camp	Total
Androscoggin	0	0	1	1	0	0	2	4
Aroostook	0	0	0	0	0	0	0	0
Cumberland	1	0	2	1	1	1	9	15
Franklin	1	0	0	0	0	0	0	1
Hancock	0	0	0	0	0	0	0	0
Kennebec	0	0	3	0	1	0	6	10
Knox	0	0	0	0	0	0	2	2
Lincoln	1	0	3	0	0	1	1	6
Oxford	0	0	0	1	0	0	1	2
Penobscot	0	0	1	0	0	0	0	1
Piscataquis	0	0	0	0	0	0	0	0
Sagadahoc	0	0	0	0	0	0	0	0
Somerset	0	0	0	1	1	0	1	3
Waldo	0	0	1	0	0	1	0	2
Washington	1	0	0	0	0	0	0	1
York	1	0	0	0	0	0	1	2
Total	**5**	**0**	**11**	**4**	**3**	**3**	**23**	**49**